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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,277	06/19/2002	Bernd Berger	20496-323	8725
7590	03/30/2004			
Proskauer Rose 1585 Broadway New York, NY 10036			EXAMINER GOETZ, JOHN S	
			ART UNIT 3725	PAPER NUMBER 11
DATE MAILED: 03/30/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,277

Applicant(s)

BERGER ET AL.

Examiner

John S. Goetz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. Applicant's amendment has been received and entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP '247 in view of Minoura et al. (JP 08-117823 A).
4. EP '247 discloses a roll stand comprising:
 - i. a pair of work rolls (43) for rolling a metal strip;
 - ii. back up rolls (49);
 - iii. a chock with support or intermediate rolls (Figs. 1 and 3);
 - iv. wherein the chock is slidable into and out of the roll stand along a longitudinal direction of the chock (see page 10, line 21 - page 11, line 5);
 - v. wherein the intermediate roll supports the work rolls in a direction perpendicular to the rolled strip (Figs. 1 and 3);
 - vi. wherein the back up rolls are retracted in order to facilitate chock/roll removal and replacement (see page 10, line 21 - page 11, line 5).

EP '247 lacks only a support beam with a plurality of individually adjustable force generation devices arranged between a support beam and the back up roll that press the back up roll in order to provide a bending force. Minoura, however, in the art of controlling rolling mills, discloses exactly such a configuration. Specifically, Minoura discloses:

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- i. a plurality of force generation devices (13-1 etc., as see Fig. 3);
- ii. wherein these devices are arranged along the back up roll (3);
- iii. wherein they act between the back up roll and the stand housing, which necessarily requires support beams (see Fig. 3);
- iv. wherein these devices provide "crown control" or bending control (see abstract).

Additionally, Minoura discloses that this structure and disclosed control system allows for more precise rolling of plate thickness. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the rolling mill taught by EP '247 with a plurality of force generation devices and control mechanism in order to allow for the rolling of more accurate plate thickness, as suggested by Minoura.

5. Regarding claim 22, Minoura discloses hydraulically operated force generation devices. Thus, claim 22 is obvious for the reasons stated above.

6. Regarding claim 23, absent a showing of criticality in solving a stated problem, the use of adjustable spindles as opposed to hydraulic cylinders is rendered an obvious matter of design choice.

7. Regarding claim 24, Minoura discloses the claimed bearing arrangement (see Fig. 2). Thus, claim 24 is obvious for the reasons stated above.

8. Regarding claims 25 and 26, it would have been an obvious matter of design choice to provide a hydrostatic or roller bearing arrangement since the applicant has not disclosed that using either bearing solves any stated problem or is for any particular purpose.

9. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP '247 in view of Minoura and further in view of Truxa, as explained in the previous Office action.

Response to Arguments

10. Applicant's arguments with respect to claims 20-28 have been considered but moot in view of the new grounds of rejection. As explained above, the EP '254 reference is no longer relied on to teach the force generation device. Instead, the newly cited Minoura reference is used to teach the newly claimed plurality of force generation devices and their function.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

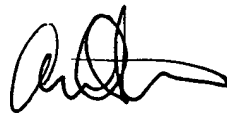
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Goetz whose telephone number is 703-308-1411. The examiner can normally be reached on Mon, Tues, Thurs, Fri 7:00am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen Ostrager can

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be reached on 703-308-3136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-3136.

JSG



ALLEN OSTRAGER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700